

at last got into the sheath of the rectus musculo. It might also find its way into the areolar tissue around the rectum and at the base of the bladder.

"The instructive features in this case I conceive to be the fact that we may have extravasation of urine from a rupture of the urethra, without any swelling in the perineum—a fact which I have nowhere seen stated before; that this is far more dangerous in its consequences than the ordinary kind; and that the absence of swelling depends upon the unusual course taken by the extravasated fluid. It will be remembered that the daily reports of this case show an entire absence of swelling from the perineum up to death; and, in the face of the fact that we had a constant discharge of urine in good quantity through the catheter, I scarcely feared, until the end of the second day, any extravasation of fluid of any kind, either blood or urine; but on that day general symptoms pointed to some serious mischief; and the abdominal swelling on the third day was still more serious; its cause was shown by the *post mortem*.

"As to the treatment of similar cases, I think the result of this case most instructive; and I should, in any future case where, in injury to the urethra, I had reason to fear escape of urine, even though there be no swelling in the perineum, provided there be general symptoms of extravasation, feel at once called upon to make a free and deep opening into the perineum. In such a case, the incision must not be merely superficial, but must go through the anterior layer of the triangular ligament; and, in order to avoid wounding (should it not be already injured), the artery of the bulb, the incision must be made in the exact mesial line. It may be a question also whether or not, the urine having found its way behind the abdominal parietes, it would not be prudent to make an opening through these, cutting through the integument, superficial fascia, and three muscles. Such a course would, I think, be quite proper; and had it, as well as the deep incision I have spoken of, been made early in this case, it is within the range of possibilities that there might have been a more fortunate termination; but, in the face of an entire absence of swelling in the perineum, and of the improbability of there being much urine extravasated, we did not consider it justifiable. I am now of opinion that I should take a different view of any similar case, and should at once resort to the free and deep opening."

30. *Chloroform in Surgical Operations, the cases in which it should not be applied.*—Mr. Coulson, in a discussion at the Medical Society of London, October 13th last, said, that all surgeons in large practice must have employed this agent a great number of times, and experience has enabled them to determine several points about which there can be, he thought, no question any longer. In the first place, it may be considered settled that chloroform is a better anæsthetic agent than ether. It may also be regarded as a settled point, that the administration of chloroform is not attended with a sufficient amount of danger to justify, as some think, its rejection altogether. On the other hand, he would not go so far as to say that its use, even with every precaution which science can suggest, is totally devoid of danger. Persons enjoying good health have poisoned themselves with chloroform. Every now and then its administration proves fatal, and no reason can be assigned. But this can be said—for many thousand cases justify the conclusion—that the danger is infinitely small to the advantages gained. The danger, however, exists; hence, he should like to see a third point accepted—viz: that chloroform should not be administered on light occasions, or for trifling ailments, and, above all, that it should not be used except under the superintendence of a competent person. The physiological effects of the agent point out at once the vast range of cases in which it may be employed with benefit. To these he should not allude; but for the present notice a few cases in which, according to his experience, chloroform should not be used. Surgeons are not entirely agreed on these, and it seems more useful to discuss a few doubtful points than to dilate on measures about which no difference of opinion exists. The annihilation of pain is the grand victory of chloroform; but, it may be asked, is it always desirable to suspend sensation during surgical operations? He (Mr. Coulson) should say not always. In some rare cases, the feelings of the patient are a useful guide to the surgeon; hence,

in these cases, sensation should not be abolished. This is the principle which should be adopted. As an example of this class of exceptions, lithotomy may be mentioned. It must be confessed that it would be an advantage if chloroform could be employed, as it is a great object to diminish the sensibility of the bladder and the spasm about the neck of that organ which so frequently exist, and not only render the operation in itself difficult, but add to the danger of its results. Yet when the nature of this delicate operation is considered, carried on, as it were, in the dark, and when it is further borne in mind that the operator should be fully aware of every step he is taking; in an organ completely removed from his sight, it cannot be expedient to render the patient insensible, and thus lose the aid which his feelings afford. On many points the patients' sensations are the chief guide which direct the surgeon when he is going wrong, and without them fatal injury might be often inflicted without his being aware of the mischief which he had done. If any operator had arrived at such a degree of dexterity and skill, that it was impossible for him to commit the slightest error, such a man might, perhaps, use chloroform, but until such a man appears, it should not be used. Much mischief might be inflicted unless the feelings of the patient were to control the proceedings of the operator. A case in point occurred in a public hospital before the introduction of crushing, at a time when the perforator alone was employed. Notwithstanding the cries of the patient, the surgeon went on using the perforator in a most industrious manner. The bystanders feared something wrong, but the surgeon appealed to the sound of a metallic body striking against stone, as a proof that the calculus was actually seized, and undergoing the process of perforation. In a few seconds the cries of the patient became more violent; blood issued abundantly from the urethra. The bystanders now interfered, and pointed out to the surgeon, that the noise which he had heard was produced by the external end of the perforator striking against the seals of his watch-chain. The operation was suspended, and the patient's life saved; but had he been insensible, there is no saying what mischief might not have been inflicted, for the calculus was not between the blades of the instrument. The same principle may, perhaps, be applied to certain obstetric operations, which, like lithotomy, are performed in a deep-seated cavity, and where the feelings of the patient may prevent the infliction of fatal mischief. It often produces vomiting; hence, it should not be used in cases where the effects of vomiting may produce an injurious influence on the health of the patient, or on the results of the operation. As examples, cataract and cleft palate may be mentioned. After division of the cornea for extraction, severe vomiting might cause repulsion of the contents of the eyeball. After sutures of the cleft palate, the severe vomiting may either cause the sutures to give way, or produce such disturbance of the parts as leads to sloughing. Besides this, the active efforts of the patient are required to aid the surgeon in many operations about the fauces; hence another principle of restriction. Indeed, the absence of such active efforts may be a cause of positive danger in certain operations, during which blood may find its way into the air-passages. Some surgeons make light of such accidents, but experience shows that they have often been the cause of much embarrassment, and, at times, of considerable danger. In addition to local circumstances, there may be certain general conditions of the patient which would render the use of chloroform doubtful. Thus it has been a question how far the agent can be safely employed in cases where a severe shock has been already produced by violent and extensive gunshot injuries. Some high authorities condemn the use of chloroform in such cases; while, on the other hand, our younger surgeons in the Crimea apply it without apprehension. It is to be hoped that the opportunities afforded during the present war will enable military surgeons to decide this interesting question.—*Lancet*, Oct. 20, 1855.

31. *Excision of the Elbow-Joint; Recovery; the motions of the Forearm and Hand, with the functions of the limb, preserved.* By RICHARD G. H. BUTCHER, Surgeon to Mercer's Hospital.—When a case of incurable disease of the elbow-joint presents itself to the surgeon, the first question for consideration is one